Environmental education through STEM

This session will explore how STEM subjects can enable students to learn about the key environmental issues that we face. We shall draw on NAEE’s teacher handbook, *The Environmental Curriculum*, and the sustainable development goals.

Juliette Green

Nina Hatch

William Scott
NAEE – the charity

NAEE began life in 1960 as the Rural Studies Association.

It is run by its members and volunteers who care passionately about environmental education.

Its charitable object is to advance environmental education within early years settings, primary and secondary schools, and institutions responsible for teacher education, in particular by

- facilitating curriculum development through the provision of resources, information and ideas for teachers
- providing financial support for pupils to visit outdoor education centres, and
- collaborating with organisations that have related objectives.
NAEE – school bursaries

Thanks to the benevolence of the late Hugh Kenrick, NAEE offers bursaries to West Midlands schools of up to £400 to take their students to outdoor learning centres for an environmental education experience. The bursaries can be used to cover centre fees and transport costs.

In return, schools are asked to write a report of the visit that explores the environmental aspects of the visit and how the visit linked to work in school.

Reports are published in the NAEE journal, *Environmental Education*. 

NAEE – National Association for Environmental Education (UK)  Charity No. 1166502  naee.org.uk  info@naee.org.uk
NAEE – journal

NAEE’s journal – *Environmental Education* – was first published in 1971 and is aimed at practitioners and policy-makers. It is published three times a year and carries reports on many kinds of environmental education, and offers insights into the Association’s work with schools and NGOs. It is free to members.

Regular content includes:

- Feature articles
- Book reviews
- School bursary reports
- Our President’s column
- Articles from young writers
- Green literacy focus

One edition is published as hard copy; two as PDFs.
What is environmental education?

Environmental education helps to foster caring, responsible attitudes and inspires young people to take action in order to live more sustainably. It can also develop a sense of identity and pride in their local environment and community. It not only covers the natural world and ‘green’ issues, but also the built environment, and the ways in which humans relate to the places where they live.

There are three interrelated components of environmental education:

• Education ABOUT the environment – developing knowledge and understanding about the environment, both local and global.

• Education IN the environment – the ‘hands-on’ element, i.e. using students’ immediate surroundings and the wider world as a learning resource which helps to develop a range of (cross-curricular) skills.

• Education FOR the environment – the development of positive attitudes and behaviours towards the environment.
The Sustainable Development Goals (SDGs)
NAEE – Recent publications

Opportunities for Environmental Education across the National Curriculum for England
Early Years Foundation Stage & Primary

Opportunities for Environmental Education across the Secondary Curriculum
Key Stages 3 & 4

National Association for Environmental Education (UK)
Annual Review 2017/18

This is a report on the work of NAEE during 2017/18. It is an account of key developments in the year, but it also contains a number of contributions that reflect on the context in which our work is carried out. These are from young conservationists Louis Driver and Finley Wilde and from NAEE Fellow, Ben Bashir, and Ian Homberg, CEO of Keep Northern Ireland Beautiful. These were published during the year in our journal or as blogs on the website: naee.org.uk.

It also contains two reports on NAEE-supported field trips which are provided in the memory of the late Hugh Armstrong and his family. These are written by Aideen Henry & Sophie Skedsmo and Sally Appleyard. The photo montage below shows children and activities on these visits.

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Can you think of some curriculum-linked activities for your key stage linked to one of the following SDGs?

**Goal 2**  End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Goal 3**  Ensure healthy lives and promote well-being for all at all ages

**Goal 6**  Ensure availability and sustainable management of water and sanitation for all

**Goal 7**  Ensure access to affordable, reliable, sustainable and modern energy for all

**Goal 12**  Ensure sustainable consumption and production patterns

**Goal 13**  Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy

**Goal 15**  Protect, restore and promote sustainable use of terrestrial ecosystems and halt biodiversity loss
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NAEE – website

NAEE’s website is a window onto the work of the Association as well as being a source of environmental education ideas and activities. The following are regularly-updated pages:

- Feature articles about environmental education practice in schools
- Book reviews and comments about books
- Webwatch posts about what like-minded organisations are doing
- Blogs with opinion and comment on environmental education
- Twitter and Facebook feeds
- Journal back numbers
- A dedicated members page.

The news page – naee.org.uk/latest-news – shows our blogs, webwatch, Twitter and Facebook feeds